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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/500,198

06/24/2004

Mach A. DeBenedictis

2001/13

9177

43693 7590 02/22/2008
INVISTA NORTH AMERICA S.A.R.L.
THREE LITTLE FALLS CENTRE/1052
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EXAMINER

YI, STELLA KIM

ART UNIT

PAPER NUMBER

1791

NOTIFICATION DATE

DELIVERY MODE

02/22/2008

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

Kathy.L.Crew@invista.com
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Office Action Summary	Application No. 10/500,198	Applicant(s) DEBENEDICTIS, MACH A.	
	Examiner Stella Yi	Art Unit 4128	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 June 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-29 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>06/24/2004</u> . | 6) <input type="checkbox"/> Other: _____ |

Detailed Action

1. This is the Initial Office Action for Application No. 10/500,198 filed on June 24, 2004.
2. Claims 1-29 are currently pending and have been fully considered.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over DEBENEDICTIS et al. (US 6,471,906 B1) and BAEK et al. (9404690 B1).

In respect to instant claims 1, 7, 9-11, 13, 19-24, and 25-29, DEBENEDICTIS et al. discloses a yarn making process and apparatus having a low tension relax zone with at least one pair of relax rolls, comprising: providing a relax zone, where yarn is relaxed; providing a tension gate in said relax zone through

which the yarn passes (Col.3, lines 1-19). Polyesters can be employed with this invention (Col.4, lines 40-44). **DEBENEDICTIS** et al. does not explicitly disclose the said yarn making process comprising an air shield comprising perforated plates positioned between the relax rolls. However, **BAEK** et al. discloses preparing polyester fiber where the method comprises setting the multiple-holed air flow plates (air shield with perforated plates) between a pair of rollers (Abstract). Also, in respect to instant claims 22-23, **BAEK** et al. discloses that maintaining a range of angle of the plates from the central axis of the roller would prevent over-flow of air (Abstract). Therefore, positioning the plates about 1 cm from relax rolls would have been obvious in order to achieve this objective. It would have been obvious to one of ordinary skill in the art to incorporate the air shield of **BAEK** et al. in the yarn making process of **DeBenedictis** et al. The motivation for the combination would have been to reduce fiber-breakage and ensure the efficient productivity of fiber-making (Abstract).

In respect to instant claims 2 and 14, **DEBENEDICTIS** et al. discloses a yarn making process and apparatus where said tension gate comprises one or more air drag devices, one or more liquid drag devices, and one or more solid surface contact devices (Col.3, lines 36-39).

In respect to instant claims 3-5 and 15-17, DEBENEDICTIS et al. discloses that the said air drag devices comprise an intermingler or countercurrent flow of air device; said liquid drag devices comprise a finished applicator or a pool of liquid in the thread line path; and said solid surface contact devices comprise one or more rolls (Col.3, lines 39-47).

In respect to instant claims 6 and 18, DEBENEDICTIS et al. discloses that the said yarn making process comprises a turbine driven roll or a free-wheeling roll (Col.7, lines 38-67).

In respect to instant claim 8, DEBENEDICTIS et al. discloses that the yarn making process comprises spin drawing, draw-twisting, draw-bulking processes (Col.1, lines 22-24).

In respect to instant claim 12, DEBENEDICTIS et al. discloses that the said tension gate creates a tension differential on said yarn of at least five milligrams per denier (Col.3, lines 54-56).

Conclusion

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stella Yi whose telephone number is 571-270-

5123. The examiner can normally be reached on Monday - Thursday from 8:00 AM to 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gilliam Barbara can be reached on 571-272-1330. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Barbara L. Gilliam/
Supervisory Patent Examiner, Art
Unit 4128

SY

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Art Unit: 4128

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